

## CLAIMS

What is claimed is:

1. An ablative baffle for a liquid rocket engine thrust chamber, comprising:  
a hub member having a hollow structure, of which the top and bottom parts are opened;  
a plurality of blade rib members, each of which is connected removably at one end to the outer surface of said hub member; and  
a blade-connecting member having a hollow structure, of which the top and bottom parts are opened, and to the inner part of which each of said blade rib members is connected at the other end.
2. The ablative baffle in claim 1, wherein said hub member has a ring shape.
3. The ablative baffle in claim 2, wherein said hub member has a plurality of connecting holes to each of which said blade rib member is connected at one end, and has a plurality of ignition flame inducing holes smaller than said connecting holes.
4. The ablative baffle in claim 3, wherein centers of said connecting holes and said ignition flame inducing holes are on the same circumference of the inner or outer surface of said hub member.
5. The ablative baffle in claim 1, wherein said hub member comprises:  
a first metal core; and  
a first heat resistant material formed on the surface of said first metal core.
6. The ablative baffle in claim 5, wherein the outer surface of said first metal core is partly exposed in the lower part to form a recess part that is used for installation purpose
7. The ablative baffle in claim 1, wherein each of said blade rib members comprises:  
a second metal core; and  
a second heat resistant material formed on the surface of said second metal core.
8. The ablative baffle in claim 7, wherein the lower part of said second metal core is exposed to form a first protrusion part.

9. The ablative baffle in claim 7, wherein width-directional cross section of said second metal core has a shape of a rectangular rod having a plurality of wedges formed in the longitudinal direction.
10. The ablative baffle in claim 7, wherein a plurality of first through holes are formed in said second metal core.
11. The ablative baffle in claim 1, wherein said blade-connecting member has a ring shape.
12. The ablative baffle in claim 11, wherein a groove is formed on the lower surface of said blade-connecting member.
13. The ablative baffle in claim 1, wherein a plurality of second through holes are formed in said blade-connecting member.
14. The ablative baffle in claim 13, wherein a zirconia heat resistant coating layer is formed on the inner surface of said blade-connecting member.
15. The ablative baffle in claim 1, wherein said blade-connecting member is lower in height than said blade rib member or said hub member.
16. The ablative baffle in claim 1, wherein said blade-connecting member is assembled with a plurality of divided parts, each of which is connected to said blade rib member.
17. The ablative baffle in claim 16, wherein said blade rib member and said divided part are formed as one body.
18. The ablative baffle in claim 16 or 17, wherein said blade-connecting member is assembled with equal divided parts of  $2N$  or  $2N+1$  wherein  $N$  is a natural number.